



Calhoun: The NPS Institutional Archive

Institutional Publications

The Quarterdeck (publication)

1987-11-20

The Quarterdeck / 1987-11-20

Naval Postgraduate School, Monterey Callifornia

<http://hdl.handle.net/10945/52349>



Calhoun is a project of the Dudley Knox Library at NPS, furthering the precepts and goals of open government and government transparency. All information contained herein has been approved for release by the NPS Public Affairs Officer.

Dudley Knox Library / Naval Postgraduate School
411 Dyer Road / 1 University Circle
Monterey, California USA 93943

<http://www.nps.edu/library>

• the Quarterdeck

Volume 4 Issue 43

A Publication of the Naval Postgraduate School

November 20, 1987

Powers receives research award

Dr. John Powers, chairman of the NPS Department of Electrical and Computer Engineering, has been selected to receive the Carl E. Menneken Research Award for 1987. The award is presented annually by the local chapter of Sigma Xi, a scientific research society, to recognize distinguished research contributions by NPS faculty.

"Receiving the award really doesn't recognize me as an individual, but rather the work that a lot of people have done — my students primarily and people that I've collaborated with on the faculty," Powers said.

Powers identified four "threads" to his research initiatives. One of those areas — the use of fiber optics in underwater communications — evolved from a working relationship with an NPS aeronautics student in the early 1970's, he said.

"A student came to me and said that he had heard that fibers were light weight and could potentially be used in airplanes to reduce the weight. At that time the Harrier aircraft was coming along and the Navy and Marine Corps were interested in reducing the weight of the electronics on it because that particular airplane is limited in its lift capability. Any weight you can save anywhere else you can gain in ordnance." It was this student's thesis which initiated Powers to the detailed study of fibers.

That project not only paved the way for a new research interest, it also influenced the academic programs of some of today's students. "From that evolved a course in fiber optics," Powers said. Students in this fibers course represent a broad mix of technical curricula. Many are electrical engineering students but, according to Powers, the course is now a requirement for all students in underwater acoustics and it is a strongly recommended elective for those in the communications engineering program — "indicating that technology is coming along that is of importance to them."

The thrust of his current studies, in which he is collaborating with oceanography Prof. Cal Dunlap, is in "looking at different ways to send information through optical fibers in an underwater environment, and testing both analog and digital techniques."

"We have deployed a couple of temporary links out here in the bay and we have done things like bringing a fiber through the surf to see if it would survive," he said. "We've (also) been

(continued page 2)

In brief...

The Dudley Knox Library has two booklets on the Federal Employees Health Benefits 1987 Open Season which will be available on a two-hour reserve basis. The booklets are: "Selecting the Right Federal Health Plan" and "Guide to 1988 Health Insurance Plans for Federal Employees." The "Civis-coop" column on page 3 has additional information on the Open Season.

The Monterey Peninsula First Class Association and the Navy Exchange will sponsor a food drive at NPS from Nov. 23 to Dec. 6.

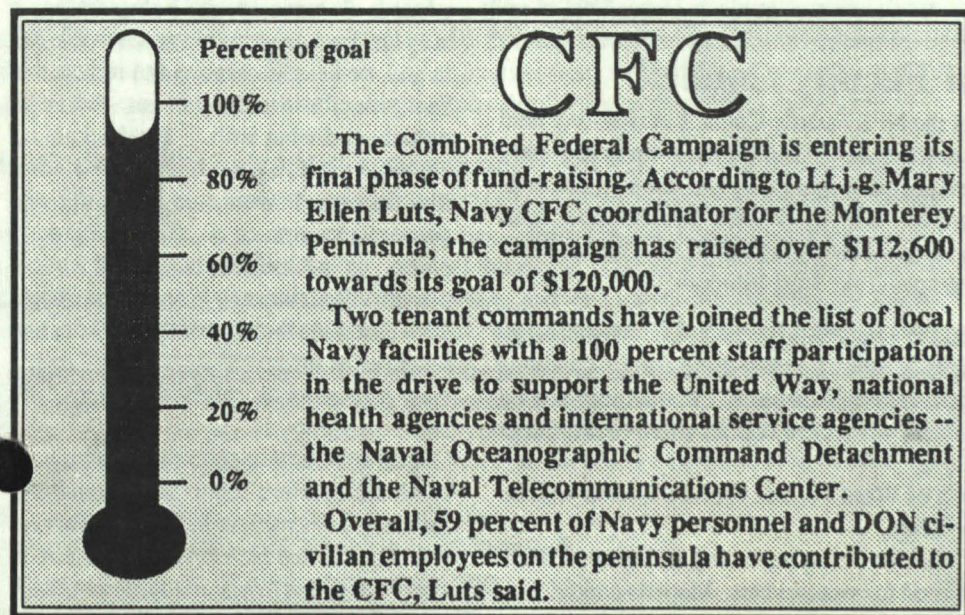
The food drive will benefit the junior enlisted personnel stationed on the Monterey Peninsula through Operation Helping Hands.

Canned goods and dry staples can be dropped off at the food drive boxes next to the Student Mail Center in Herrmann Hall and in front of the Navy Exchange La Mesa Convenience Store. For further information contact Lt. Dan Smith at ext. 2576 or RM1 Jane Belcher at ext. 3198.

The OSWC will hold its annual Thanksgiving Bake Sale next Tuesday, Nov. 24, from 11 a.m. to 1 p.m. The sale, which will take place near the Student Mail Center and Museum in Herrmann Hall, will feature traditional Thanksgiving favorites including whole pies, cakes and breads. More information is available by contacting Pat Berke at 375-5137.

Fiscal year 1987 was a record setter for safety at NPS, according to the Safety and Occupational Health Office. The fewest number of injuries and lost work days during the past five years were recorded last fiscal year, said Fred Spillan, NPS safety director.

The Saint Thomas Aquinas Catholic Chapel is scheduled to reopen today following renovation. New cushioned pews, kneelers and blue carpeting have been installed. Additionally, permanent railing has been added to the altar area.



From the Superintendent

by Rear Admiral Robert C. Austin

Heads Up! Library Down for the Holidays

During December 1987, sections of the Dudley Knox Library will be closed so that compact, movable shelving can be installed in the southeast wing of the main deck and the basement. The library has almost reached complete working capacity in terms of shelving for its books and journals, and compact shelving will provide relief pending the construction of an extension to the building.

The installation project will entail the dismantling of fixed shelving and the temporary storage of books, unclassified theses, and abstract journals. These will be reshelfed after the compact units have been erected.

When will this calamity fall upon our library? We will try to minimize the impact but our plan is to close the library, with the exception of the Research Reports Division, during the following periods.

Basement: Closed Friday, Dec. 11, 1987 - Sunday, Jan. 3, 1988.

Main Deck, Second Deck: Closed Friday, Dec. 18, 1987 - Sunday, Jan. 3, 1988.

The Research Reports Division will remain open for service from 11:45 a.m. to 4:30 p.m., Monday through Friday. Further details will be announced through a NAVPGSCOLNOTE, to be disseminated in early December.

From the Chaplain

by Commander Robert G. Rowland

As the Dow-Jones averages rise and fall like a roller coaster, we realize that many have lost much of their nest eggs and others have taken a financial bath. I would remind each of us that little ship of the pilgrims rode waves just as precipitous as any the Dow-Jones has ridden and much more filled with danger. Yet the pilgrims were very grateful and thankful that first Thanksgiving day. As we come to the observance of Thanksgiving, some would say that they have nothing for which to be thankful.

For some, Thanksgiving Day is a time of parades, football and stuffing themselves just as the turkey has been stuffed with dressing. I am reminded of the little girl who was having problems because she hated rice pudding. Once, when her mother had prepared the pudding for supper, the little girl refused to eat it. There was an impasse. Finally, realizing that her mother really meant business, the little girl quickly downed the rice pudding, hating every bite. "Good", said her mother, "now we will all say our Thanksgiving prayer to God for all His blessings. The little girl was in no mood for any of this. "I have nothing I want to thank God for," she said. The mother replied, "You will sit there and think until you do. You will not leave the table until you have offered your prayer of Thanksgiving." There was a brief silence, then the little girl quickly said, "Thank you God there wasn't anymore of that pudding and it didn't make me sick! Amen. Now, can I leave the table?"

This Thanksgiving Day, as we sit down to our scrumptious meals, may we bow and give thanks not only for the good food, but may we also be thankful for the country in which we live, where we can freely worship, disagree with the powers that be and enjoy the pursuit of happiness.

Andrus elected chairman of Faculty Council

Professor Al Andrus was elected chairman of the NPS Faculty Council in balloting held last week, succeeding Art Schoenstadt. Also elected were Guillermo Owen as secretary and Jim Esary as representative-at-large. Seven positions were filled on standing committees: Professional Practices -- Art Schoenstadt and Carroll Wilde; Scholarship-- Max Woods; Retirement, Insurance and Special Functions -- Harvey Dahl and Don Trahan; Plans and Facilities -- George Thomas; and, Nominating -- Toke Jayachandran.

Nominations, mainframe software highlight OSAC meeting

The Officer Student Advisory Committee began accepting nominations for the positions of chairman, vice chairman and recorder during its Nov. 10 meeting. Nominations can be submitted until the next OSAC meeting in December when the elections will be held. Other items addressed in the November meeting include:

Word Perfect: NPS has a mainframe version of Word Perfect. Soon the fonts will be available on the 3800 printer. More news is coming!

Library Vault: The vault will open during working hours beginning in January 1988.

Moped Parking: Park mopeds in areas designated for motorcycles. Mopeds parked near bike racks will be ticketed.

Menneken research award goes to Powers

(continued from page one)

designing the electronics that drive the fiber that takes information in the experiment."

Powers' other principal research partner at NPS is aeronautics Prof. Dave Netzer. His work here, Powers said, has involved the use of computer image processing to retrieve information from holograms.

It's a matter of "teaching" a computer to take on a tedious and laborious scientific task.

Said Powers: "He (Netzer) is able to record holograms of combustion that's

"Receiving the award really doesn't recognize me as an individual, but rather the work that a lot of people have done — my students primarily and people that I've collaborated with on the faculty."

occurring inside solid-fuel rocket motors. The problem is, once you get the hologram reconstructed, there are thousands of particles frozen in this hologram and you'd like to have some way of extracting this information — we need the size of all the particles.

"It's very tedious to have a person go through and look at the size of each particle that's on the image so we're trying to teach the computer to do it. We've been working on that using modern image processing techniques to get the size of these particles and particularly to eliminate the background. It turns out the hologram has a very bad background environment to work in and we have to remove and reduce this background so we can pull out what is the particle and what isn't." The background clutter in the hologram is a feature of laser illumination, Powers said. The salt and pepper appearance of this background clutter, called speckle, is reduced in most conventional filters by blurring the image. "But that loses the edge of the particles and what we're interested in is size — so it's very important to retain the edges," he said.

It turned out that scientists working with synthetic aperture radar encountered the same type of problem in their data analyses. Powers and Netzer have been able to apply the filters invented to improve SAR

(continued page 3)

Civiscoop

by the Civilian Personnel Office

Federal Employees Health Benefits (FEHB) 1987 Open Season

Open season for health benefits changes will continue through Dec. 11, 1987. The 1988 enrollment information guide and plan comparison chart for open season has been issued to all eligible employees. Individual FEHB plan brochures are now available in the Civilian Personnel Office.

Listed below are FEHB carriers available for this area.

AETNA (Indemnity Benefit); AFGE; Alliance; APWU; Blue Cross-Blue Shield (Service Benefit Plan); GEHA; Mail Handlers; NAGE; NALC; NFFE; NTEU; Postmasters and Federal Managers Association. (See page 8 in your FEHB plan comparison chart.)

First Farwest Foundation (formerly NHA), prepaid plan, is available for those living in this geographical area. This plan is located on page 11 in your FEHB plan comparison chart.

Employees who wish to enroll, change options, or change plans can pick up FEHB plan brochures from the Civilian Personnel Office for review. A maximum of three brochures will be issued to each employee at any one time. The brochures should be returned to CPO after completion of the review.

Questions concerning FEHB Open Season should be directed to ext. 3277.

Vacancy announcements: Applications for the following vacancies are now being accepted in the Civilian Personnel Office. For further information consult the vacancy announcement in your department or call ext. 2001.

Accounting technician, GS-4 and 5, comptroller; computer systems analyst, GS-12, electronic technician, GS-8 or 9, FNOC; oceanographer, GS-9, oceanography; supervisory computer specialist, GM-13, computer systems programmer, GS-11, computer science; firefighter (structural), GS-5, fire dept.; librarian, GS-11 and library technician (typing), GS-5, library; electronics technician, GS-9, electrical and computer engineering; air conditioning equipment mechanic, WG-8 and general engineer, GS-12, public works; education technician, (typing), GS-4, continuing education; supervisory contract specialist, GS-7 or 9, supply; secretary (typing), GS-3, 4, 5, 6, 7, various departments; clerk typists, GS-4, all departments.

EE professor receives Menneken research award

(continued from page 2)

images while working on methods to computerize the particle-counting procedures.

On other research projects Powers is studying acoustical imaging using ultrasound waves. He has also used acoustical optical signal processing to develop techniques to increase significantly the computational speed of models used to analyze the transmission of sound in the oceans.

Sigma Xi introduced the research award program in 1963, later changing its name to the Menneken Research Award in memory of NPS Distinguished Professor Carl E. Menneken, who had served as dean of Research Administration from 1962-1972. A commemorative plaque listing past recipients of the award is on display in the Dudley Knox Library.

Additional NPS personnel recognized for help in NATO conference

Not all NPS personnel who assisted in the NATO conference were listed in last week's article. Others who helped were: Ray Bauman, Henry Davilla, Kathy Deamaral, Arnold Hintsala, ET1 Mary Jo Jorewicz, IS1 Jeffrey Johnson, MS2 Bruce Kavanaugh, SK3 Marvin Knight, ISSN Bobby Knight, SM2 Brian Kontak, Shirley Linser, Jack McGaughey, Arthur Mock, Lt.j.g. Joan Pinaire, C.C. Reed, Thomas Reynolds, Bob Smith, and Rodney Trudell.

The Quarterdeck is published weekly in accordance with NPPR-35. Views and opinions expressed are not necessarily those of the Department of the Navy. Deadline for all submissions, including classified ads and items for the campus calendar, is noon each Friday.

Superintendent: Rear Admiral Robert C. Austin
Public Affairs Officer: Commander Allen R. Sherwood
Deputy Public Affairs Officer: John F. Sanders
Editor: JO1 Frank Summers

Campus Calendar

November

**NOVEMBER IS
 NAVY SMOKING PREVENTION MONTH
 FOR MORE INFORMATION CONTACT
 AV 224-5742/46 OR (202) 694-5742/46**

-Friday November 20-
 0810, SPANAGEL HALL RM-208
 LT J. L. KNECHT, NPS
 "VALIDATION OF AUTOMATED
 IN-SERVICE PERFORMANCE
 MONITORING TECHNIQUES FOR THE AN/
 BQQ-5 (TR-317) SPHERICAL ARRAY
 TRANSDUCERS"

1110, SPANAGEL HALL RM-117
 DR. X. K. MARUYANA, NPS
 "OPTICAL TRANSITION RADIATION
 APPLICATION AS A REAL-TIME,
 ON-LINE DIAGNOSTIC FOR
 ELECTRON BEAMS"

1200, LA NOVIA ROOM
 NPS TOASTMASTERS
 (POC: LTJG PAT HENDRICKS, X4569)

-Tuesday November 24-
 1100-1300, HERRMANN HALL
 NEAR THE STUDENT MAIL CENTER
 OSWC THANKSGIVING BAKE SALE
 (POC: PAT BERKE, 375-5137)

1510, SPANAGEL HALL RM-310
 DR. JAY MCCREARY,
 NOVA UNIVERSITY
 "MODELLING THE OCEAN CIRCULATION
 ALONG EASTERN BOUNDARIES"

-Wednesday November 25-
 1000, HALLIGAN HALL RM-201F
 DR. GARRETT VANDERPLAATS,
 UC-SANTA BARBARA
 "GENERAL APPLICATIONS OF
 OPTIMIZATION IN ENGINEERING"

-Monday November 30-
 1200, LA NOVIA ROOM
 AFCEA LUNCHEON

Officers to receive military awards

NPS Superintendent Rear Adm. Robert C. Austin will decorate eight officers in ceremonies today at 2:30 p.m. in the Quarterdeck Lounge, Herrmann Hall.

The officers and their awards are:

Navy Commendation Medal

Lt. Cdr. Richard B. Darden, USN
 (Gold Star in lieu of second)

Air Force Commendation Medal

First Lt. Joseph T. McCartin, USAF

Navy Achievement Medal

Cpt. Gary D. McLean, USMC

Lt. Warren E. Rhoades, III, USN

Lt. Jane A. Treadway, USN

Junior Officer Shiphandling Award

Lt. William R. Ault, USN,

Lt. Michael L. Gribaudo, USN.

Sports Beat

by JO1 Frank Summers

The Monterey Peninsula First Class Association will take on KMST-TV in a benefit basketball game Nov. 25, at the NPS gym. The game will start at 7 p.m. Donations will be accepted at the door and all proceeds will benefit the local YMCA.

Turkey tournament this weekend at NPS

Defending champions Dyna Boys will put their title on the line in the second annual men's slow pitch turkey tournament, which will be held at Sparks Field, Nov. 20-22.

The tournament will begin with four games on Friday night at 6 p.m. A number of teams from NPS will participate in the tournament.

Both Saturday and Sunday games will begin at 9 a.m. and continue until 9 p.m.

NPS women's basketball team in action

The fourth annual NPS women's basketball tournament will be held this weekend at the NPS gym. The NPS women will tip off the tournament with a game against NAS Lemoore, beginning at 10 a.m.

In the second game of the tournament the College of San Mateo will take on Mare Island Naval Station of Vallejo at 11:30 p.m. The NPS team will be back in action against UC Berkeley at 1 p.m.

The tournament will be played both Saturday and Sunday from 10 a.m. to 4 p.m.

NPS soccer team scores another victory

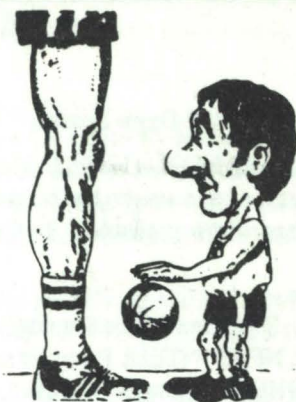
The NPS soccer team raised its preseason record to 7-2 with a 7-0 victory over DLI (Navy), last Saturday at Pacific Grove High School. For the third game in a row the NPS team held its opponents scoreless through the outstanding play of goalkeeper Collin Cooper and a flawless defense anchored by Rodolfo Reategui.

Hamadi Jamali led the scoring attack against DLI with three goals. Other scorers were Hycon Soo, Hector Mariscal, Kurtis Guth and Hassan Khaidar.

The team, which is comprised of officer students and staff, will commence league play later this month.

Women's basketball team needs players

The NPS women's varistiy team is still holding tryouts for this years team's. Anyone interested in playing should contact Frank Samuel at ext. 2466 for more information.



Rec News

The Rec Office has tickets for Disneyland which are good for any day except Saturday. Ticket prices are \$17.00 for adults and \$15.00 for children three through 11. For more information contact the Rec Office at ext. 2466.

The Fort Ord Ticket and Tours office has the following events scheduled for Nov. and Dec.

Nov. 21-22, Los Angeles Raiders vs Denver Broncos, \$67; Nov 25-29, Southern California Fling, \$140; Nov. 27, Ice Capades, \$19; Dec. 5, San Francisco shopping, \$15; Dec. 12, Winchester Mystery House and Mystery Spot, \$15.

Classified ads



LOST: Gray caddy and diskettes with coursework. If found, contact LT John Hart, SMC 1598.

FOR SALE: 1982 Buick Regal - \$4200 immaculate condition - 65K miles. Call 646-5154.

WANTED: Adult leaders for Cub Scout Pack 84, La Mesa. Call Ben at 373-5144 or 647-4420.

FOR SALE: 90 ft fence with gate for La Mesa house. \$50. Call 375-7950.

MOVING SALE: Gold fan-back chair, radar detector. 372-7651.

NEWER 2 BEDROOM APT. IN NICE AREA IN SEASIDE: Private courtyard, storage room, carport, laundry facility. \$600/mo. No pets. Call 624-4289.

FOR SALE: '86 Toyota Camry LE. 21 K loaded, excellent condition. \$13,500. Call 372-1921.

FOR SALE: DP 120 exercise bike. \$40. Call 375-7950.

MUST SELL: Pair of technic speakers. Model SB-6920 380W power and JVC KD-AZZJ tape deck (metal cap). Low offer. Call 375-4795.

WANTED: 480 cu. ft. aluminum scuba tanks. Call 647-9386.

At the Movies

All movies will be shown at 7:00 p.m. except where noted and are subject to change. For more information about the movie schedule call 242-5566.

Barker Theater

Friday, November 20 - The Celler (R)

Saturday, November 21 - The Principal (R)
- Smurfs and the Magic Flute (1 p.m. G)

Sunday, November 22 - The Principal (R)

Presidio of Monterey Theater

Friday, November 20 - Three O' Clock High (PG)

Saturday, November 21 - The Believers (R)

Sunday, November 22 - Best Seller (R)

Hanson Theater

Friday, November 20 - Hellraisers (R)

Saturday, November 21 - Interspace (PG)

Sunday, November 22 - Surrender (PG)